

the demilitarized zone. The barrier, in short, will be manned by native troops, not U.S. Marines.

This, at least, is the plan in the back of the mind of Secretary of Defense Robert S. McNamara and no military commanders in the field here dispute him. While not wildly enthusiastic, these commanders believe that even the first portion of the barrier along an already cleared strip of land called "the trace" will make it far more difficult for Ho Chi Minh's northern legions to penetrate deeply into Quangtri Province.

It is only a two-minute hop by helicopter from the advance Marine base here at Dongha up to Conthien, the scene of the most savage fighting of the war and only one mile from the DMZ. Through the pelting rain, the first portion of the terrain cleared for the barrier is easily seen. It runs from the hilltop Marine stronghold of Conthien east for ten miles to Giolinh.

This first stretch of the incipient barrier still has neither fortification nor electronic devices installed, but these will start being emplaced soon. The work is excruciatingly slow and painful because of its easy access to enemy rockets from across and within the DMZ.

But from the vantage point of Marine Brig-Gen. Louis Metzger's helicopter, the military advantage of the barrier becomes instantly clear. The ten mile "trace" covers the flattest ground along the whole 45-mile DMZ. It is through this inviting stretch of easy terrain that the enemy has mounted his successive attacks on Conthien, slipping through in twos and threes at night, then regrouping for a dawn attack on the Marine stronghold. Block this open door and the North Vietnamese will be forced either west, into rough and hilly country, or east, into the coastal swamp that parallels the South China Sea.

The succeeding portions of the barrier will be constructed later, and they will not follow the natural contour of the land, clinging instead to the valleys and avoiding the mountains. From Conthien to the border of Laos, the land rises from the coastal plain steeply to a series of razorback mountains, each one higher than the last.

Consequently, the barrier will not at all resemble the ill-fated Maginot Line. It will be a series of pieces, like a jagged fence, with gaps where there are no valleys.

Details of the fortifications to be built within the cleared strip of terrain are top-secret, but they will include the usual border-style fort at periodic intervals, barbed wire, and highly-sophisticated electronic devices.

As long as this war lasts, the enemy will continue to infiltrate across the DMZ, but when the barrier is completed, getting across to attack our troops will no longer be as easy as a midnight stroll in the park.

The longer-range purpose, however, is more important: The Johnson Administration is now planning for what is hopefully defined here as "the postwar period" and the barrier is a major component, built in advance, to help South Vietnam defend itself against the North without 500,000 American troops. But that time is still far, far off.

METRIC SYSTEM OF WEIGHTS AND MEASURES

Mr. PELL. Mr. President, the Scale Manufacturers Association, Inc., has, in the person of its executive secretary, Arthur Sanders, spoken strongly in favor of the legislation proposed by Congressmen GEORGE MILLER, RICHARD OTTINGER, ROBERT MCCLORY, DON EDWARDS, and me, authorizing the Commerce Department to study the feasibility of the United States converting to the metric

system of weights and measures. In an article written for the Scale Journal, Mr. Sanders has eloquently supported the need for making such a study as soon as possible.

Mr. Sanders' arguments are so sound, Mr. President, that I ask unanimous consent that they be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

IS CONGRESS GOING TO FORGET ALL ABOUT THE METRIC SYSTEM AGAIN?

(By Arthur Sanders, executive secretary, Scale Manufacturers Association, Inc.)

As these words are written, it appears highly probable that Congress will fail to act on important resolutions by Senator Claiborne Pell of Rhode Island and Congressmen George P. Miller of California and Richard Ottinger of New York. Bills have been introduced by Congressmen Don Edwards of California and Robert McClory of Illinois also.

In case you've forgotten, Senator Pell and these Congressmen want to authorize the Commerce Department to make a serious study of just exactly what might be involved if the United States were to forsake measurements in pounds and ounces, inches and feet, and convert to the more precise, easier-to-use metric system.

Aside from the scientific and business communities (and weights and measures people, of course) it seems awfully hard to get most folks much interested. At a time when war, race relations and higher taxes hold the headlines, it just doesn't seem vital to most Americans what units of weights and measures we use . . . and more's the pity for that. The United States is fast finding itself standing alone as we stand pat and take no action . . . or, worse still, seek no hard facts on what might be involved if we got in step with the rest of the world in this vital matter.

George Washington, Thomas Jefferson, James Madison, and John Quincy Adams (to mention only a few Presidents) each in turn called upon Congress to take definitive action in the weights and measures field. We're still waiting.

Washington, our first President, called upon the First Congress to establish a uniform system of weights and measures. It was much needed. In the early days of our Republic, weights and measures were chaotic. As John Perry has pointed out in his book, *The Story of Standards*, in those times a bushel of oats, for example, varied all the way from 32 pounds in Connecticut to 36 pounds in the Washington Territory. There were many different "gallons". French, Dutch, Spanish and English weights and measures were in use in different areas of the United States. It hurt trade and confused business.

Instead of setting up a unified system of weights and measures, Congress responded by appointing a Committee . . . which asked the first Secretary of State, Thomas Jefferson, to recommend what ought to be done. Jefferson gave his recommendations . . . and nothing was done about them.

In 1817, Congress got around to looking into the matter of a national weights and measures law again. Another Committee asked then Secretary of State John Quincy Adams what ought to be done. The younger Adams' report on weights and measures is the most famous and scholarly treatise on the subject up to modern times. It is a classic study. But no action resulted from it, either.

Finally, the welter of confusing, conflicting standards of weights and measures became an intolerable burden on business and trade. A Treasury Department employee, Ferdinand Hassler, acting on his own, virtually "adopted" a system of weights and

measures for the United States—and made his decision stick. Hassler collected standards from Europe and adapted these to American use. Trade, commerce—and the collection of taxes—demanded that standard units of weights and measures which meant the same thing to all men.

When Congress found out what Hassler was doing, instead of being unhappy, it seems to have heaved a collective sigh of relief, and passed a Resolution urging him to hurry along with his work.

So far, so good—in spite of the delay. Hassler's units of weights and measures were adopted by the states . . . the basis for our present system.

Critics of Congress have often pointed a scornful finger at our national legislature for its reluctance to pass laws in the weights and measures field. But, in some ways, it may be a sign of Congressional prudence and wisdom—rather than the reverse. Taxes may go up or down, alliances may be formed or broken. But, when you go messing around with the weights and measures laws, it is controversial as well as important. Chaos can result if you don't know what you're doing. As Kings and even Dictators have found, it isn't merely a matter of "passing a law". Usage must follow . . . custom is important.

But where does that leave us in the important matter of studying the metric system? In the early days of the Republic, inaction and lack of hard facts hurt . . . but perhaps not too much. Modern science and technology, however, has transformed the world beyond recognition from what it was in Jefferson's time, for example. Then it might take a clipper ship two years to journey—say—to China and return. Today, the transmission of news is instantaneous. Defense needs, commerce, trade and travel have been accelerated to the same ratio.

WE OUGHT TO HAVE FACTS, INFORMATION

The Resolutions of Senator Pell and Congressman Ottinger call for studies . . . not for legislation compelling anybody to do anything. In a matter as important as weights and measures, it's absolutely vital to have the best facts and the most informed, impartial opinion that it is possible to have. Every single thing that man wears, eats, or uses have been weighed or measured at least once—and often many times in its manufacture, processing, distribution or sale.

What might be involved in the wider use of the metric system in the United States? If America ultimately switched over to it?

For years, we've had debates and discussions. But most of these are by ardent advocates or ardent opponents of the metric system.

The work of the National Bureau of Standards of the Commerce Department commands universal respect among informed and intelligent people. It is neither an advocate nor an opponent of the metric system. Why not let such an informed, impartial study be made? Then the discussion could be clarified. Decisions, if any, could be made on a more informed basis.

Since 1866, the metric system has been legal but not compulsory in the United States—by Act of Congress which provided a conversion table to Hassler's weights and measures. Japan, Korea, India and Great Britain are recent converts to the metric system. Some 90% of the world's population now uses it. The United States, alone among the great powers and commercial nations, stands by our cumbersome system on the basis of custom and practice.

As the National Geographic Society recently pointed out:

"In daily life, Americans employ at least 85 different weights and measures. Length comes by the inch, foot, yard, chain, rod, furlong, league, and mile. Area may be in square miles or acres. Volumes and weights

September 21, 1967

are stated in teaspoons, quarts, pecks, gallons, barrels, bushels, drams, gills and cords. There are three different tons, two pounds, three ounces, three quarts and three miles. The United States' inch differed from that of Canada until 1959."

The National Geographic Society notes: "Many of our measures grew out of the Egyptian, Roman, and British gauges based on the human hand and foot."

The Egyptian cubit was the distance between the elbow and the middle finger tip. The mile, from the Latin *mille*, or thousand, was determined by the thousand double steps of an average Roman soldier. King Henry I established medieval England's yard by measuring the distance between the tip of his finger and the tip of his nose. An early Scottish King defined the inch as the average width of the thumbnails of three men—large, medium, and small."

It is true, of course, that the costs of converting to the metric system would be high. But how high? Only a factual study can tell us this. And also, perhaps, how high the cost of continued inaction might be. Way back in 1906, Dr. Alexander Graham Bell, inventor of the telephone and one of America's most distinguished scientists, advocated the metric system. "It is a labor-saving device of the greatest importance and value," Bell said.

It would be well if Senator Pell's Resolution . . . or one of the House bills . . . were passed. Then, perhaps, we would start getting some informed answers on this important question.

THIN ANTI-BALLISTIC-MISSILE SYSTEM

Mr. McGEE, Mr. President, in today's edition, the Christian Science Monitor has focused upon the remarkable peroration of Defense Secretary McNamara, which wound up his recent San Francisco announcement about U.S. plans to construct a thin anti-ballistic-missile system. The Monitor does not see Moscow more willing to give up the power struggle, or forego stirring up the status quo, than in the past. But it does find both Washington and Moscow more willing to concede reasonableness to each other than at any time since the relations between the superpowers began to thaw. It was reasonableness that Mr. McNamara called for in San Francisco, and it is reasonableness which the world needs, rather than a new race toward armament.

Mr. President, I ask unanimous consent that the Monitor's editorial be printed in the RECORD.

There being no objection, the editorial was ordered to be printed in the RECORD, as follows:

REASONABLENESS

- "In the end, the root of man's security does not lie in his weaponry.
- "In the end, the root of man's security lies in his mind.
- "What the world requires in its 22d Year of the Atomic Age is not a new race towards armament.
- "What the world requires in its 22d Year of the Atomic Age is a new race toward reasonableness."

These words were part of the remarkable peroration with which Defense Secretary McNamara wound up his announcement in San Francisco that the United States had decided on "Chinese-oriented ABM deployment."

By an apt coincidence Mr. McNamara was speaking on the eve of the formal opening in

New York of the 22d General Assembly of the United Nations. With all its limitations and imperfections, the UN is still the best instrument that men have devised so far to bring the sovereign states of the world toward reasonableness and the rule of law.

Few have high hopes that this latest UN gathering will bring the world significantly closer to a solution of its chronic problems and disputes—hunger, over-population, Vietnam, the Middle East, Cyprus, and Kashmir, to cite only a few of them. But there is something novel about this 22d General Assembly.

For the first time, this annual gathering will be presided over by the representative of a Communist land, Romanian Foreign Minister Manescu. Admittedly Romanians these days are a rather special brand of Communists. Allied with Moscow, they have lines out to the non-Communist West and also try to maintain amenities with Peking. But Mr. Manescu's acceptability as assembly president to both Moscow and Washington—without which he would not have got the job—is still a token of the growing measure of reasonableness in relations between the two nuclear superpowers.

Certainly the Russians' installation of a limited ABM system of their own has played no small part in convincing the Johnson administration that the United States could no longer stay naked in terms of this latest innovation in defense. Yet Mr. McNamara leaned over backwards to telegraph to Moscow that Washington's decision to put in an ABM system did not mean a sharpening of American attitudes toward the Russians. The American system, he insisted, was "designed against a possible Chinese attack." And American deployment of the system "in no way indicates that we feel an agreement with the Soviet Union on the limitation of strategic nuclear offensive and defensive forces is any the less urgent or desirable."

He so spoke because both Washington and Moscow are more willing to concede reasonableness to each other than perhaps at any time since the thaw began. This does not mean that the Russians will refrain from stirring the status quo when it is to their advantage to do so. This does not mean that the power struggle between them is over. But it does mean that both recognize the responsibilities which go with being a nuclear superpower—if the world is not to be blown to smithereens.

This is a measure of reasonableness for which we can be grateful, even if we regret that it was still not broad enough to make unnecessary the mutual deployment of ABM systems.

FRANCIS X. GALLAGHER, OUTSTANDING MARYLAND PUBLIC SERVANT

Mr. TYDINGS, Mr. President, for many years a large company in Baltimore City has presented an annual award for outstanding contributions in high school athletics known as the "unsung hero award." This annual award is given to that player in high school football and lacrosse in the Maryland Scholastic Association who, although having gone unnoticed by the press and most fans, has provided steady and inspirational leadership on the football or lacrosse field. Often the recipient is an offensive football lineman who has tenaciously protected his quarterback and consistently opened the holes in the opposing line. On other occasions the award is given to a defensive captain or middle linebacker who has displayed constant and steady performance although his work may have gone unnoticed because of a more colorful or

spectacular defensive player on the same team. Over the years, the unsung hero award has become one of the most significant awards a high school boy in the Baltimore area can earn. This award brings the unsung hero to the public's attention; he has already earned respect of his fellow teammates long before he receives the award.

Mr. President, there should be an unsung hero award for citizen contribution in the field of public service and civic activities. If such an award is ever developed at the national level, Maryland has a unanimous choice for receipt of the national award. My reference is to Francis Xavier Gallagher, lawyer, public servant, civic leader, businessman, father, and advisor to many of the principal political leaders in the Free State.

I first met Frank Gallagher when we were both students at the University of Maryland School of Law. As any law student can tell you, studying law is no part-time occupation. However, Frank Gallagher had the mental dexterity and physical stamina to work for his master's degree in political science at the Johns-Hopkins University, work as a part-time reporter for the Baltimore Sun, teach at Loyola College, and assist in an investigation for the Baltimore City solicitor's office—all at the same time he was compiling an enviable record at the Maryland law school. This excellent performance in a variety of activities has been typical of Frank Gallagher's career from that day to this.

Mr. Gallagher's political acumen is well known in the State of Maryland. He is one of the most respected political advisors to the leaders of the Free State of both parties. He may well have been elected Governor of the State of Maryland at the age of 38 had he chosen this course of service.

As a Knight of Saint Gregory, he is recognized as one of the foremost Catholic laymen in the United States. He is the principal legal adviser to Lawrence Cardinal Shehan, Maryland's great churchman. In addition, he is recognized as one of the most knowledgeable attorneys in the field of church law in the United States.

I had the pleasure of serving in the Maryland House of Delegates with Frank Gallagher. Frank Gallagher now has the great opportunity to breath new life into the Maryland Legislature as a delegate to the Maryland Constitutional Convention and chairman of the committee on the legislative branch.

Frank Gallagher's service to the State of Maryland has not been confined to the legal, political, and legislative worlds. He has served as chairman of the Baltimore City Hospital board, as regional chairman for the National Conference of Christians and Jews, as president of the Hibernian Society, as a member of Maryland's Fair Employment Opportunity Commission, and as a member of the Board of the Citizens' Housing and Planning Association. In 1965, he was named Holy Name Man of the Year and before that he was named Young Man of the Year by the junior chamber of commerce. Frank Gallagher is also active in the business world. As a member of the board of directors of